



ZCAS University

SEC 1162 INTRODUCTION TO MACROECONOMICS

MID SEMESTER TESTS

25th October 2023

TIME 16:30-19:30HRS

TIME ALLOWED: READING AND WRITING – THREE HOURS

INSTRUCTIONS:

1. Section A: this question is compulsory and must be attempted.
2. Sections B: Answer THREE (3) questions from this section.
3. This examination paper carries a total of 100 marks.
4. Candidates must not turn this page until the invigilator tells them to do so.

SECTION A: Question 1 is compulsory and must be attempted

Question 1

As an economist in first year you find people in the streets are discussing the affairs of the economy. They are debating that interest rates in Zambia are too high, output is low because local people do consume more than they produce. That the government has borrowed a lot and is spending on unnecessary things. Unemployment levels, on the other hand, are high and yet there is little money to assist small scale entrepreneurs to start up anything. Using the knowledge you have learnt in BEF112, explain the following:

A. Identify the following as either fiscal or monetary policy and explain the effect on goods and money market.

- a. The government increases spending on roads and bridges. (7marks)
- b. The central bank lowers interest rates. (7marks)
- c. The government increases the income tax rate. (8marks)
- d. The government buys bonds in the open market. (8marks)

B. Suppose banks hold reserves equal to 12 per cent of total deposits, and the public wish to hold 3 per cent of the deposits. The monetary base is $H = C + R$ and broad money is cash with the public plus bank reserves. What is the value of money and bank deposit multiplier? (10marks)

(total:40marks)

SECTION B: Attempt any THREE questions in this section.

Question 2

a. A country's central bank is concerned about a potential recession. What policies could it implement to boost aggregate demand in the closed economy? Show on the graph (10marks)

b. A country's government is considering implementing a new tax on imports. What are the likely effects of this tax on aggregate demand in the economy? Show on the graph (10 marks)

(total:20marks)

Question 3

Consider the following equations for aggregate demand in an open economy:

$$AD = C + I + G + NX$$

where:

- AD is aggregate demand
- C is consumption
- I is investment
- G is government spending
- NX is net exports

$$\begin{aligned} AD &= C + I + G + NX \\ &= 100 + 0.75(1-0.2)Y + 150 + 200 - 0.25Y \\ &= 100 + 150 + 200 - 0.25Y \end{aligned}$$

Assume the following values for the parameters:

$$C = 100 + 0.75(1-0.2)Y$$

$$I = 150$$

$$G = 200$$

$$NX = 50 - 0.25Y$$

where:

- Y is real GDP

A. Calculate the equilibrium level of real GDP (Y) for this economy. (8marks)

B. Government implements an expansionary fiscal policy by increasing $G=300$ and reducing the tax rate to 10%. Calculate the new equilibrium level of output (Y).

(8marks)

C. On one graph show your answers in part A and B.

(4marks)

(total;20marks)

Question 4

- a. Explain the liquidity preference theory. (10marks)
 - b. Explain the functions of central bank and the tools used to influence money in circulation. (10marks)
- (Total:20marks)

Question 5

- a. Derive the IS-LM framework graphically and (10marks)
 - b. Use it to show what will happen if there is an expansionary fiscal policy financed by borrowing. (10marks)
- (Total:20marks)

END OF EXAMINATION

